

WHAT IS CLAIMED IS:

- 1 1. A method for forming leads, comprising:
2 forming a liftoff mask having a desired width;
3 forming leads contiguous to and on opposite sides of the liftoff mask;
4 removing the liftoff mask, the removal of the liftoff mask leaving fencing on the
5 leads;
6 forming a layer of carbon over the leads; and
7 performing chemical mechanical polishing on the leads at the fencing to
8 preferentially remove the fencing.
- 1 2. The method of claim 1 wherein the desired width of the liftoff mask is a
2 trackwidth for a magnetoresistive sensor.
- 1 3. The method of claim 1 wherein the forming a liftoff mask having a desired
2 width further comprises forming a single layer liftoff mask.
- 1 4. The method of claim 1, further comprising removing any remaining
2 carbon using an oxygen plasma.
- 1 5. The method of claim 1 wherein the forming leads on opposite sides of the
2 liftoff mask further comprises depositing leads using a sputtering process.

1 6. A method for forming a magnetic read sensor, comprising:
2 forming a magnetoresistive sensor element; and
3 forming leads to the magnetoresistive sensor element, the forming the leads to the
4 magnetoresistive sensor element further comprising:
5 forming a liftoff mask having a desired width over the magnetoresistive
6 sensor element;
7 forming leads contiguous to and on opposite sides of the liftoff mask and
8 in contact with the magnetoresistive sensor element;
9 removing the liftoff mask, the removal of the liftoff mask leaving fencing
10 on the leads;
11 forming a layer of carbon over the leads; and
12 performing chemical mechanical polishing on the leads at the fencing to
13 preferentially remove the fencing.

1 7. The method of claim 6 wherein the desired width of the liftoff mask is a
2 trackwidth for the magnetoresistive read sensor.

1 8. The method of claim 6 wherein the forming a liftoff mask having a desired
2 width further comprises forming a single layer liftoff mask.

1 9. The method of claim 6, further comprising removing any remaining
2 carbon using an oxygen plasma.

1 10. The method of claim 6 wherein the forming leads on opposite sides of the
2 liftoff mask further comprises depositing leads using a sputtering process.

1 11. The method of claim 6 wherein the forming the magnetoresistive sensor
2 element further comprises forming an anisotropic magnetoresistive (AMR) sensor
3 element.

1 12. The method of claim 6 wherein the forming the magnetoresistive sensor
2 element further comprises forming a giant magnetoresistive (GMR) sensor element.

1 13. A magnetic read sensor, comprising:
2 a magnetoresistive sensor element; and
3 leads, coupled to the magnetoresistive sensor element, the leads to the
4 magnetoresistive sensor element created by forming a liftoff mask having a desired width
5 over the magnetoresistive sensor element, forming leads contiguous to and on opposite
6 sides of the liftoff mask and in contact with the magnetoresistive sensor element,
7 removing the liftoff mask, the removal of the liftoff mask leaving fencing on the leads,
8 forming a layer of carbon over the leads and performing chemical mechanical polishing
9 on the leads at the fencing to preferentially remove the fencing.